



{In Archive} Reid Supply Documents

John Jones to: Randy Brown

08/27/2009 03:09 PM

Cc: John Cook, Beth Finzer, Image Harris, David Whitfill, Chris Jump

History: This message has been replied to.

Archive: This message is being viewed in an archive.

I enclosed supporting Reid Supply documents for a radiological assessment at 2549 York in Wichita.

1. BWM Reid Memo The first mention of radiological wastes from paint sludge. (1980)
2. Reid Order The Order By KDHE, with Press Release, including citation of possession of radioactive materials without an RAM License. (1980 order was signed and civil penalty in 1984)
3. EPA RCRA PAR The EPA draft Assessment of Reid, including the radiological storage area in Open Area North of Building I.

I did not include emails between KDHE staff concerning the need for radiological surveys. I did not find any documented radiological surveys.

John Jones
Environmental Scientist
Kansas Department of Health & Environment
Bureau of Environmental Remediation
Response & Restoration Unit
(785) 296-1679



jtjones@kdheks.gov BWM Reid Memo.pdf Reid Order.pdf EPA RCRA PAR (excerpt).pdf

513023



RCRA

16

DEPARTMENT OF HEALTH AND ENVIRONMENT

RECEIVED

APR 22 1980

MEMORANDUM

BUREAU OF ENVIRONMENTAL
SANITATION

To: Harry

From: Wes *Wes*

Subject: Reed Supply

Date: 4-18-80

Deborah and I were at the reprocessing site today to take pictures for Mel. Deborah asked "Turk" to show us where he was dumping his old acid containers. When he showed us, we discovered that the area of the site is about four times larger than we thought. All the area west of the reprocessing plant to the railroad tracks, more than 1/2 mile, belongs to Reed according to Turk. Debby also found drums and sludge in this area. She asked Turk if he had disposed sludge anywhere else. He said that he repaired some potholes for Mo Pac RR on the north side from Reed.

I took twenty slide type pictures of the area in which we saw drums with the CDV-707.

After leaving the site we went to the main office in town and delivered the order to Mr. Gene E. Stamm, G.M.

P.S. the slides should be back by Thur. 24th.

8. Have any wastes ever been disposed on site?

Yes

No

Type of waste Paint Sludge

Location _____

Present Status _____

SPECIFIC INSTRUCTIONS AND ITEMS:

Have not applied for disposal
of sludge. However, when
paint sludge showed radioactivity
and may have to be disposed of
elsewhere.



State of Kansas . . . John Carlin, Governor

DEPARTMENT OF HEALTH AND ENVIRONMENT

News Release

Barbara J. Sabol, Secretary

Forbes Field
Topeka, Kansas 66620
913-662-9300



Release Date: **IMMEDIATELY**
6/22/84

News Contact: **Bob Moody**
Extension 263

Reid Supply Company, 2549 North New York, Wichita, has been assessed a \$7,000 fine by the Kansas Department of Health and Environment for violations of laws regulating the storage of hazardous waste.

An April inspection by staff members of KDHE and the U.S. Environmental Protection Agency found a number of instances of noncompliance at the industrial chemical supply and recycling facility. On the day of the inspection, approximately 1,300 drums of hazardous waste were stored on site pending recycling, reclamation, or disposal. The maximum process design capacity for the facility is 500 drums.

Additionally, drums containing hazardous wastes were stored in deteriorated condition; some drums were leaking at the time of the inspection or had leaked prior to the inspection. Hazardous waste drums were not stored with adequate spacing to provide for the inspection of each drum and were stored in an unsafe manner. Hazardous wastes which are incompatible were found to be stored adjacent to each other. The inspectors also determined that adequate security was not provided for all drums of hazardous waste stored at the facility as evidenced by drums stored outside covered and fenced storage areas.

Dr. Allan Abramson, Director of Environment, in issuing the fine also ordered Reid Supply Company to correct all violations noted in the inspection. Storage practices which provide for individual inspection of drums and eliminate unsafe conditions must be implemented by July 1.

(more)

REID SUPPLY ORDER
MOODY

Additionally, all deteriorating or damaged drums must be removed from the facility by July 1 and the number of drums in storage must be reduced to no more than 500 by July 15.

Reid Supply Company officials have met with KDHE staff and have expressed their desire to work cooperatively to correct all violations. The order assessing the fine is subject to appeal.

John Paul GARCIA
Chuck Lind
A-14 file

BEFORE THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

In The Matter Of The Possession Of
Radioactive Materials And Hazardous
Wastes By The Reid Supply Company Of
Wichita, Kansas

Case No. 80-718-1880

RECEIVED

BUREAU OF ENVIRONMENTAL
SANITATION

O R D E R

The Secretary of the Department of Health and Environment,
Joseph F. Harkins, now considers the captioned matter. The Secretary's
files reflect that his staff members made an inspection and appraisal
of the premises of the Reid Supply Company (Reid) offices located at
911 East Indianapolis, and the operational facility located at or
about 25th and New York Streets, Wichita, Kansas, on March 25, 1980.
The Secretary's staff interviewed the person in charge of the premises,
Mr. H. C. "Turk" Humann, made observation of the premises, took
samples from the content of barrels and other materials, and performed
chemical analysis of certain materials.

The Secretary has in hand the results from the field analysis
as well as the laboratory analysis of the specimens taken from the
site.

The Secretary makes the following findings of fact:

1. There are approximately 3,000 barrels of waste solvents
at the Reid site. There are no markings or other labels
on the said barrels.
2. Several of the 3,000 barrels contain radioactive materials,
including radium 226.
3. At the Reid premises, there is a machine, known as a
"solvent still" used for the reclaiming of contaminated
solvents; the solvent still has been used in the past,
is presently being repaired, and is intended to be used
in the future to process waste materials on site in the
said barrels.
4. The residue materials from the solvent still, described
as "still sludges" have been disposed of throughout the
operational premises of the Reid site in Sedgwick County.
Such disposal presents a potential health hazard to
workers at the Reid site and persons near the area for
the reason that such materials may be ingested either
through hand-to-mouth or windblown or air-borne contact.

-2-

The Secretary takes notice of the provisions of K.A.R. 28-35-175, which provides as follows:

"No person shall receive, use, possess, transfer, or dispose of radioactive material except as authorized in a specific or general license issued pursuant to these regulations, or as otherwise provided in these regulations. Authority to transfer possession or control by the manufacturer, producer, or processor of any equipment, device, commodity, or other product containing source, or by-product materials whose subsequent possession, use, transfer, and disposal by all other persons are exempted from regulatory requirements may be obtained only from the United States nuclear regulatory commission, Washington, D.C. 20555."

The Secretary concludes that the Reid Supply Company is in violation of K.A.R. 28-35-175 because it does not have a license issued by the Secretary, has not been exempted by the United States Nuclear Regulatory Commission, and has received, used, possessed, transferred or disposed of radioactive materials.

The Secretary concludes that Reid is operating a hazardous waste storage and processing facility, within the meaning and scope of K.S.A. 1979 Supp. 65-3402(1), and the Secretary's files further reflect that Reid does not have a permit for operation of same, in accordance with K.S.A. 1979 Supp. 65-3407(b), which provides as follows:

"After June 30, 1977, in the state of Kansas, it shall be unlawful for any person to construct, alter or operate a hazardous waste processing facility or storage or disposal area of a hazardous waste management system without first obtaining a permit from the secretary."

The Secretary takes notice of K.A.R. 1979 Supp. 28-29-41(a) which provides as follows:

"No person shall store, transport, or accept for processing or disposal a hazardous waste that is not marked and labeled in compliance with this regulation and other applicable state and federal laws."

The Secretary finds that Reid has accepted for transport hazardous wastes which are not marked or labeled and therefore Reid is in violation of K.A.R. 1979 Supp. 28-29-41.

-3-

The Secretary determines, based on the above findings, and conclusions that the storage, transportation, treatment, and disposal of wastes by the Reid Supply Company may present an eminent and substantial hazard to the health of persons or to the environment; the Secretary determines that it will be necessary for him to take action, within the meaning and scope of K.S.A. 1979 Supp. 65-3419(f) to protect the health of such persons and the environment.

IT IS THEREFORE ORDERED BY THE SECRETARY that the Reid Supply Company:

1. Hold and contain all waste materials, including solvents, barrels or other containers and waste sludges, now in its possession and on its operational premises. Such materials are not to be processed, transported or otherwise handled until decontamination methodologies and disposal procedures have been approved in writing by the Director of the Division of Environment of the Kansas Department of Health and Environment.
2. Submit to the Director of the Division of Environment, within 15 days of receipt of this order, a written proposal indicating the procedures to be used, in regard to storage of the materials described in 1., to assure that there will be no unauthorized removal of waste materials from the Reid premises; such procedures shall also address and provide assurances that Reid will protect against loss, leakage or dispersion of materials, specifically including the occurrence of fire or water damage. Reid shall take all reasonable and necessary steps to prevent removal, loss, leakage or dispersion pending the written approval by the Director of the Division of Environment.
3. Shall submit to the Director of the Division of Environment, within fifteen (15) days of receipt of this order, a proposal for the method to be used, and the location

-4-

thereof, of the disposal, if any, of the disassembled solvent still and its components, further, Reid shall indicate the manner and place of disposal of any components previously removed.

4. Submit to the Director of the Division of Environment, within thirty (30) days of receipt of this order, a written proposal describing procedures to be used for identification of all barrels, equipment and materials which contain radioactive materials; said proposal shall include the type of equipment to be used for such determination and the qualification of personnel conducting such procedures.
5. Shall submit to the Director of the Division of Environment, within thirty (30) days of receipt of this order, a proposal containing detailed survey of radioactive materials which are, or may be, on or about the premises of the Reid site, including buildings, building interiors, building roofs, and roadways. The proposal shall provide for cleanup techniques, and may be in accordance with the attached document entitled "Contamination Limits for Facilities Using Radium."
6. Shall submit to the Director of the Division of Environment, within thirty (30) days of receipt of this order, all records and other documentation indicating shipments by Reid of waste solvents or reprocessed solvents, or other materials transported by Reid, since the time when Reid first began receiving solvents.
7. Shall submit, within sixty (60) days of receipt of this order, to the Director of the Division of Environment, documentation indicating the origin of all solvents on the Reid premises; such documentation shall provide specific information regarding those solvents which contain radioactive

-5-

8. Shall take a complete inventory of the contents of all drums containing waste materials, and this inventory shall be completed in a written report detailing same submitted to the Director of the Division of Environment, within ninety (90) days of receipt of this order.
9. Shall submit a written proposal to the Director of Environment, within ninety (90) days of receipt of this order, detailing procedures and methods to be used for the disposal or transfer of all radioactive material now in the possession or Reid; the disposal or transfer of radioactive material shall not take place until such time as the Director has approved the procedure for such disposal or transfer, and in addition, Reid has obtained all necessary and required permits for storage, transportation and disposal of such materials.

IT IS FURTHER ORDERED BY THE SECRETARY that the Reid Supply Company shall cease and desist from receiving, transporting, storing or reprocessing waste materials, except as provided above in this order, until such time as the appropriate permits and licenses have been obtained by Reid, in compliance with:


1. K.S.A. 48-1607 (Licensing, registration, possession and use of sources of radiation and records thereof),
2. K.A.R. 28-35-175 (cited and quoted above),
3. K.S.A. 1979 Supp. 65-3407(b) (Construction, alteration or operation of solid or hazardous waste processing facility or disposal area without permit unlawful; permits; fees; conditions; denial, suspension or revocation of permits),
4. K.A.R. 1979 Supp. 28-29-48 (Transportation of hazardous waste),
5. K.A.R. 1979 Supp. 28-29-44 (Storage of hazardous waste; permit required),

-6-

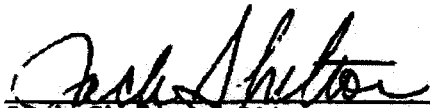
6. K.A.R. 1979 Supp. 28-29-55 (Hazardous waste processing facilities).

If the Reid Supply Company is aggrieved by this order, it may file a written request, for administrative hearing, with the Secretary of the Department of Health and Environment, within thirty (30) days of receipt of this order.

IT IS BY THE SECRETARY SO ORDERED.


Joseph E. Harkins, Secretary
Kansas Department of Health and
Environment

Approved as to legality and form:


Jack Shelton, Attorney
The Special Assistant
Kansas Department of Health and
Environment
Forbes Field, Bldg. 740
Topeka, Kansas 66620
(913) 862-9360

CERTIFICATE OF PERSONAL SERVICE

I hereby certify that delivered a copy of the above and foregoing Order to _____ at the location of _____ on the _____ day of April, 1980.

CERTIFICATE OF MAILING

I hereby certify that on the 17th day of April, 1980, a true and correct copy of the foregoing Order was mailed to Mr. H. C. "Turk" Humann, 911 East Indianapolis, Wichita, Kansas 67211 by depositing the same in a properly addressed envelope postage prepaid, certified mail, return receipt requested in the U.S. mail.


Staff Member

Certified No. 2806899

**DRAFT
PRELIMINARY ASSESSMENT REPORT**

**RCRA FACILITY ASSESSMENT
HYDROCARBON RECYCLERS, INC.
WICHITA, KANSAS**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, D.C. 20460**

Work Assignment No.	:	R07015
USEPA Region	:	7
Date Prepared	:	September 24, 1990
Contract No.	:	68-W9-0006
PRC No.	:	009R07015
Prepared by	:	B&V Waste Science and Technology Corp.
Work Assignment Manager	:	John P. Nett
Telephone No.	:	913/339-2900
USEPA Primary Contract	:	Mark Matthews
Telephone No.	:	913/551-7635

**RCRA FACILITY ASSESSMENT
DRAFT PRELIMINARY ASSESSMENT REPORT
HYDROCARBON RECYCLERS, INC.**

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
ABBREVIATIONS	i
1.0 INTRODUCTION	1-1
1.1 HAZARDOUS AND SOLID WASTE AMENDMENTS AND OTHER REGULATORY AUTHORITY	1-1
1.2 RCRA CORRECTIVE ACTION PROGRAM	1-3
1.3 PRELIMINARY REVIEW	1-4
1.4 VISUAL SITE INSPECTION	1-5
2.0 ENVIRONMENTAL SETTING	2-1
2.1 FACILITY LOCATION AND GEOGRAPHIC SETTING	2-1
2.2 CLIMATOLOGY	2-1
2.3 HYDROLOGY	2-3
2.4 SOILS AND GEOLOGY	2-4
2.5 HYDROGEOLOGY	2-8
2.6 GROUND WATER USAGE AND WATER QUALITY	2-9
3.0 FACILITY AND PROCESS DESCRIPTIONS	3-1
3.1 PAST FACILITY OPERATION	3-1
3.1.1 South Plant	3-1
3.1.2 North Plant	3-2
3.2 CURRENT FACILITY OPERATION	3-3
3.3 REGULATORY HISTORY	3-7
4.0 SOLID WASTE MANAGEMENT UNITS AND AREAS OF CONCERN	4-1
4.1 PROCESS AREA STORAGE TANKS	4-1
4.1.1 Unit Characteristics	4-1
4.1.2 Waste Characteristics	4-3
4.1.3 History of Releases	4-4
4.1.4 Potential for Release	4-4
4.2 WASTE BLENDING AND DRUM PROCESSING AREA	4-5
4.2.1 Unit Characteristics	4-5
4.2.2 Waste Characteristics	4-6
4.2.3 History of Releases	4-6
4.2.4 Potential for Release	4-6

**RCRA FACILITY ASSESSMENT
DRAFT PRELIMINARY ASSESSMENT REPORT
HYDROCARBON RECYCLERS, INC.**

TABLE OF CONTENTS

4.3	FORMER DRUM PROCESSING AREA	4-6
4.3.1	Unit Characteristics	4-6
4.3.2	Waste Characteristics	4-7
4.3.3	History of Releases	4-8
4.3.4	Potential for Release	4-8
4.4	PROCESS AREA TRUCK BAY	4-9
4.4.1	Unit Characteristics	4-9
4.4.2	Waste Characteristics	4-9
4.4.3	History of Releases	4-9
4.4.4	Potential for Release	4-9
4.5	SPARGING AREA	4-10
4.5.1	Unit Characteristics	4-10
4.5.2	Waste Characteristics	4-10
4.5.3	History of Releases	4-11
4.5.4	Potential for Release	4-11
4.6	HOT ROOM	4-11
4.6.1	Unit Characteristics	4-11
4.6.2	Waste Characteristics	4-11
4.6.3	History of Releases	4-12
4.6.4	Potential for Release	4-12
4.7	ELEVATED TANK STORAGE AREA	4-12
4.7.1	Unit Characteristics	4-12
4.7.2	Waste Characteristics	4-12
4.7.3	History of Releases	4-13
4.7.4	Potential for Release	4-13
4.8	NONREGULATED WASTE STORAGE AREA	4-13
4.8.1	Unit Characteristics	4-13
4.8.2	Waste Characteristics	4-14
4.8.3	History of Releases	4-14
4.8.4	Potential for Release	4-14
4.9	SOLIDS DRYER AREA	4-14
4.9.1	Unit Characteristics	4-14
4.9.2	Waste Characteristics	4-15
4.9.3	History of Releases	4-15
4.9.4	Potential for Release	4-15

**RCRA FACILITY ASSESSMENT
DRAFT PRELIMINARY ASSESSMENT REPORT
HYDROCARBON RECYCLERS, INC.**

TABLE OF CONTENTS

4.10	DRUM CRUSHER	4-15
4.10.1	Unit Characteristics	4-15
4.10.2	Waste Characteristics	4-16
4.10.3	History of Releases	4-16
4.10.4	Potential for Release	4-16
4.11	CRUSHED DRUM ROLL-OFF BOXES	4-16
4.11.1	Unit Characteristics	4-16
4.11.2	Waste Characteristics	4-16
4.11.3	History of Releases	4-17
4.11.4	Potential for Release	4-17
4.12	WARM ROOM	4-17
4.12.1	Unit Characteristics	4-17
4.12.2	Waste Characteristics	4-17
4.12.3	History of Releases	4-18
4.12.4	Potential for Release	4-18
4.13	DOCK AREA	4-18
4.13.1	Unit Characteristics	4-18
4.13.2	Waste Characteristics	4-19
4.13.3	History of Releases	4-19
4.13.4	Potential for Release	4-19
4.14	DRUM STORAGE WAREHOUSE (BUILDING C)	4-20
4.14.1	Unit Characteristics	4-20
4.14.2	Waste Characteristics	4-21
4.14.3	History of Releases	4-21
4.14.4	Potential for Release	4-21
4.15	CORROSIVE WASTE STORAGE AREA	4-21
4.15.1	Unit Characteristics	4-21
4.15.2	Waste Characteristics	4-22
4.15.3	History of Releases	4-22
4.15.4	Potential for Release	4-22
4.16	DRY SOLIDS GONDOLA	4-23
4.16.1	Unit Characteristics	4-23
4.16.2	Waste Characteristics	4-23
4.16.3	History of Releases	4-23
4.16.4	Potential for Release	4-23

**RCRA FACILITY ASSESSMENT
DRAFT PRELIMINARY ASSESSMENT REPORT
HYDROCARBON RECYCLERS, INC.**

TABLE OF CONTENTS

4.17	LABORATORY SAMPLE STORAGE AREA	4-24
4.17.1	Unit Characteristics	4-24
4.17.2	Waste Characteristics	4-24
4.17.3	History of Releases	4-24
4.17.4	Potential for Release	4-25
4.18	VEHICLE FUELING TANKS	4-25
4.18.1	Unit Characteristics	4-25
4.18.2	Waste Characteristics	4-25
4.18.3	History of Releases	4-25
4.18.4	Potential for Release	4-25
4.19	OPEN AREA ALONG SOUTHWEST CORNER	4-26
4.19.1	Unit Characteristics	4-26
4.19.2	Waste Characteristics	4-26
4.19.3	History of Releases	4-26
4.19.4	Potential for Release	4-27
4.20	BUILDING J	4-27
4.21.1	Unit Characteristics	4-27
4.21.2	Waste Characteristics	4-27
4.21.3	History of Releases	4-28
4.21.4	Potential for Release	4-28
4.21	BUILDING I	4-28
4.21.1	Unit Characteristics	4-28
4.21.2	Waste Characteristics	4-29
4.21.3	History of Releases	4-29
4.21.4	Potential for Release	4-30
4.22	CONCRETE VAULT	4-30
4.22.1	Unit Characteristics	4-30
4.22.2	Waste Characteristics	4-31
4.22.3	History of Releases	4-31
4.22.4	Potential for Release	4-31
4.23	OPEN AREA NORTH OF BUILDING I	4-31
4.23.1	Unit Characteristics	4-31
4.23.2	Waste Characteristics	4-32
4.23.3	History of Releases	4-32
4.23.4	Potential for Release	4-33

4.22.2 Waste Characteristics

Wastes previously handled in the area of the concrete vault included chlorinated and nonchlorinated solvents processed during Building I distillation operations. The vault is currently out of use and is partially filled with miscellaneous debris (VSI,1990).

4.22.3 History of Releases

A deteriorated drum was observed in the discharge basin at the time the April 1984 USEPA inspection was conducted. No waste releases have been reported from the vault during previous inspections. The vault is currently out of service.

4.22.4 Potential for Release

There is currently no active waste handling conducted or waste storage maintained around the vault. The vault remains open and is filled with miscellaneous debris, although the exact contents are unknown. The sidewalls of the vault are "etched" and fractured which has compromised the structural and retention capabilities of the vault. Precipitation is received by the vault which may in turn infiltrate into the underlying media. Since the past discharges and the current debris in the vault have not been characterized; the structural and retentive capacities of the vault are no longer in tact; and the vault remains open to surface discharges, there is a high potential for release from the vault if contaminants are present.

4.23 OPEN AREA NORTH OF BUILDING I

4.23.1 Unit Characteristics

The open area north of Building I was previously utilized for bulk storage of virgin solvents in above ground tanks and storage of drummed wastes. Figure 3-1 shows the storage tanks previously utilized at the RSC North Plant. (The tank locations were located as shown on Figure 3-1 based on a figure provided in a Reid Supply Company Part A permit application dated July 23, 1981. These tanks were observed during the VSI to actually be located north and east of Building I).

During an April 1984 USEPA inspection of the Reid Supply Company, numerous drums were noted to have been stored north of Building I. Approximately 98 drums of paint wastes and waste thinner were stored in the northeast corner of the north plant. Of these drums, 15 were found to contain radioactive material from solvent stripping illuminated aircraft instruments. During the same inspection, drums of

liquid caustic were observed north of Building I. This solution was reportedly used to clean the still systems. All drums, with the exception of the 15 radioactive waste drums, were removed from the open area north of Building I at the time of a July 1984 USEPA inspection. The radioactive waste drums had been overpacked, placed on pallets, and covered with a tarp for subsequent offsite disposal.

The open area north of Building I is no longer operated by the Service Chemical Company, now a defunct company. Miscellaneous equipment, piping and concrete formwork still remain on the property. During the VSI, representatives of Service Chemical Supply Company were in the process of cutting up four 5,000-gallon tanks in the northeast corner of the property. This removal process is shown in a photograph included on page B-15 of Appendix B. The area north of Building I is comprised of gravel and earthen cover. The open area north of Building I has been identified as an area of concern for the purpose of this report.

4.23.2 Waste Characteristics

Drummed materials identified during previous inspections that have been stored in the open area north of Building I include paint wastes, 15 drums of which were radioactive. Virgin nonchlorinated solvents, including acetone, xylene, toluene, isopropyl alcohol, acetone, methyl ethyl ketone, methanol, denatured alcohol, mineral spirits, and butyl cellosolve, were stored in above ground tanks in this area (as shown on Figure 3-1).

4.23.3 History of Releases

The April 1984 USEPA inspection noted that many of the drums stored in the open area of the north plant were open, some in a deteriorated condition. During the VSI, surface staining was noted directly northeast of Building I along the fence line which separates the property from an open drainageway to the north. This surface staining can be seen in a photograph included on page B-14 of Appendix B. In addition, distressed vegetation was noted between the fence and the drainageway as can be seen in photographs included on pages B-15 and B-16 of Appendix B. The drainageway was filled with standing water at the time of the VSI.

There are two PVC ground water observation wells located south of the fence line in this area, as shown on Figure 2-4. These wells were installed by Union Pacific

Railroad to monitor groundwater chemistry at or within five feet of the ground water table. Analytical results for samples collected from these wells are included in Table 2-4

4.23.4 Potential for Release

No wastes are currently stored or handled in this area. Surface staining may indicate source areas of soil contamination, with potential contaminant runoff to the open drainageway or potential contaminant infiltration to the underlying groundwater. Since surface runoff from the area north of Building I drains directly to the open drainageway, the potential for release is high.

Table 2-4. Analytical Results for Volatile Organic Compound Concentrations in Ground Water Samples Taken From Existing Wells in the Vicinity of HRI.

Volatile Organic Compound	Detection Limit (ug/l)	Concentration (ug/l)									
		HRI-2**	HRI-3**	RSC-1**	UPR-1*	UPR-2*	DRB-1*	DRB-2*	DRB-3*	DOM-1***	DOM-2***
		(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Chloromethane	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.9	ND	2.6	ND	66.0	27.0	ND	ND	1.2	ND	ND
1,1-Dichloroethane	0.6	ND	26.5	ND	365.0	18.0	ND	ND	191.0	ND	ND
1,1-Dichloroethane	0.5	ND	4.4	ND	86.0	15.0	ND	ND	91.0	ND	ND
trans &/or cis 1,2-Dichloroethane	0.5	ND	76.4	1.7	ND	18.0	ND	ND	53.0	ND	ND
Chloroform	0.5	ND	147.0	17.5	15.0	ND	ND	4.9	1.5	ND	ND
1,2-Dichloroethane	0.6	ND	ND	ND	59.0	ND	0.6	ND	ND	14.9	ND
1,1,1-Trichloroethane	0.7	ND	122.0	ND	4755.0	97.0	0.6	ND	960.0	ND	ND
Carbon Tetrachloride	0.7	ND	635.0	84.4	ND	ND	ND	17.0	ND	ND	ND
Bromodichloromethane	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.4	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND
trans 1,3-dichloropropene	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethane	0.6	8.1	6260.0	16.5	ND	13.0	2.1	ND	450.0	ND	ND
Benzene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis 1,3-Dichloropropene	0.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethane	1.1	ND	504.0	2.6	ND	26.0	ND	ND	78.0	ND	ND
Toluene	0.4	ND	0.9	0.9	190.0	151.0	ND	ND	ND	1.0	ND
Chlorobenzene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.7	ND	ND	ND	ND	11.0	ND	ND	ND	ND	ND
meta-Xylene	0.6	ND	ND	15.1	ND	ND	ND	ND	ND	2.1	ND
ortho &/or para-Xylene	0.6	ND	ND	23.1	250.0	214.0	ND	ND	ND	2.0	ND
1,3-Dichlorobenzene	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2 &/or 1,4-Dichlorobenzene	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key - HRI-1 - Monitoring Well Utilized by Hydrocarbon Recyclers, Inc.

DRB-1 - Monitoring Well by Derby Refinery, 1980-1983

UPR-1 - Monitoring Well Installed by Union Pacific on Former SCBC Property

DOM-1 - Domestic Well

ND - Not Detected

* Well screened at or within 5 ft. of the water table

** Well screened within 5 ft. of the base of the aquifer

*** Screened depth unknown